

WHAT IS CLAIMED IS:

1. A preparative liquid chromatograph comprising:

a plurality of detectors including a mass spectrometer;

5 a chromatogram generator for generating a plurality of chromatograms each corresponding to each of the plurality of detectors;

a binary converter for converting each of the plurality of chromatograms into a respective binary signal by comparing the chromatogram with a predetermined threshold;

10 a logical operator for performing a binary operation on the plurality of respective binary signals and for generating a resultant binary signal; and

a separation controller for controlling a fraction collector of the preparative liquid chromatograph based on the resultant binary signal to separate components from a sample.

2. The preparative liquid chromatograph according to claim 1, wherein the

15 plurality of detectors include an ultraviolet-visible light spectrophotometer (UV detector) and an evaporation light scattering detector (ELSD) as well as the mass spectrometer.

3. The preparative liquid chromatograph according to claim 1, wherein the

20 binary operation performed in the logical operator is AND of all the respective binary signals.

4. The preparative liquid chromatograph according to claim 1, wherein the

binary operation performed in the logical operator is OR of all the respective binary signals.

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5. The preparative liquid chromatograph according to claim 1, wherein the preparative liquid chromatograph further comprises:

a shift time determiner for determining a shift time between a plurality of chromatograms; and

5 a shift time canceller for canceling the shift time between the plurality of chromatograms.

6. The preparative liquid chromatograph according to claim 1, wherein the preparative liquid chromatograph further comprises:

10 a shift time determiner for determining a shift time between a plurality of chromatograms; and

a shift time canceller for canceling the shift time between the plurality of respective binary signals corresponding to the plurality of chromatograms.

15 7. The preparative liquid chromatograph according to claim 5, wherein the shift time determiner determines the shift time between the plurality of chromatograms by measuring a shift time between peaks of the same component contained in a standard sample.

20 8. The preparative liquid chromatograph according to claim 6, wherein the shift time determiner determines the shift time between the plurality of chromatograms by measuring a shift time between peaks of the same component contained in a standard sample.